PATENT CLAIMS

1. A measurement unit (1) for collecting and forwarding measured data, comprising at least one measuring point (7) for determining the measured data, and at least one interface for at least indirectly transferring the measured data to a control center (2), characterized in that the measurement unit (1) also has a process unit (8) and means for local storage and/or processing of measured data in the measurement unit (1) in that the measured data are firstly transferred from the measuring point (7) to the process unit (8), these measured data, if appropriate, firstly being converted into digital signals via an analog-to-digital converter if they are made available by the measuring point (7) in analog form, and
in that the measured data are subsequently written actively by this process unit (8) into a database (6) of the control center (2).

2. The measurement unit (1) as claimed in claim 1, characterized in that before being transferred to the control center (2) the measured data are processed at least partially in the process unit (8), this processing preferably being, in particular, compression, filtering, assignment, a mathematical transformation, or a combination of these types of processing.

3. The measurement unit (1) as claimed in one of the preceding claims, characterized in that measured data measured in an essentially continuous or clocked fashion are transferred from the process unit (8) to the control center (2) in periodic packets, this transfer taking place, in particular, preferably at least 1 to 20 times per minute.

4. The measurement unit (1) as claimed in one of the preceding claims, characterized in that the measurement unit is controlled by filing the control commands in the control center (2), that is to say, in particular, the control center (2) files the control commands in a database (3), and by the process unit (8) independently reading out these control commands periodically from the control center (2) and/or a database (3) and controlling the measurement unit (1) in accordance with these control commands.

5. The measurement unit (1) as claimed in claim 4, characterized in that the control center (2) also provides parameters assigned to the control commands and/or files said parameters in a database (5), and in that the process unit (8) periodically reads out these parameters together with the control commands and controls the measurement unit (1) in accordance with these control commands and the associated parameters.

6. The measurement unit (1) as claimed in one of claims 4 or 5, characterized in that after control commands and/or parameters are read out of the control center (2) and/or of the databases (3, 5) the process unit (8) acknowledges the corresponding action to the control center (2) and/or a further database (4).

7. The measurement unit (1) as claimed in one of claims 4 to 6, characterized in that the process unit (8) reads from and/or writes to at least one of the databases (3-5) not directly relevant to the measured data, doing so at least 1 to 20 times per minute.

8. The measurement unit (1) as claimed in one of the preceding claims, characterized in that the control center is a data server (2) and/or a database, and in that as interface the measurement unit (1) has a network interface and/or communication interface, the

network preferably being, in particular, a local network that is wired or wireless.

9. The measurement unit (1) as claimed in one of the preceding claims, characterized in that what is involved is a measurement unit (1) for measuring and collecting partial-discharge data at a generator system, in particular for measuring and collecting partial discharges detected at a high-voltage terminal.

10. A method for collecting and forwarding measured data by using a measurement unit (1) as claimed in one of claims 1-9, characterized in that the measurement unit (1) independently periodically files the measured data in the control center (2) and/or in a database (6) and/or file in the control center (2), and in that the measurement unit (1) periodically and independently retrieves control commands and, if appropriate, associated parameters from the control center (2) and/or from databases (3, 5) and/or files likewise present in the control center (2), and in that the status of the measurement unit (1) is periodically filed in the control center (2) and/or a further database (4) and/or files.